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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,755	10/21/2003	Kazuhito Sacki	3140-016	6009

33432 7590 02/21/2007  
KILYK & BOWERSOX, P.L.L.C.  
400 HOLIDAY COURT  
SUITE 102  
WARRENTON, VA 20186

EXAMINER
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LIEW, ALEX KOK SOON

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/689,755	<b>Applicant(s)</b> SAEKI, KAZUHIITO	
	<b>Examiner</b> Alex Liew	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sathyanarayana (US pub no 2004/0146201).

With regards to claim 1, Sathyanarayana discloses an image processing apparatus comprising

an edge window setting unit for an edge window for detecting an edge of an object in image (see fig 5 – 130 – there are elements unit with in the dotted line window),

an element setting unit for setting a plurality of window elements in the one edge window setting unit (see fig 5 – 120 – these smaller window are use for detecting edge within 130),

an edge detection unit for scanning each of the window elements and obtaining edges every each the window element (in fig 5 – all the smaller windows, 120, within 130 had detected edges) and

a calculation unit for obtaining an edge related information from the edges detected by said edge detection unit (see paragraph 19 lines 17 – 23).

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Sathyanarayana does not disclose the object in the image being a workpiece. However, the methods of Sathyanarayana are the same as what is claimed in claim 1. A computer only identifies the values of pixels of object at pixel locations within images, but does not know the type of object in the image until identification of classification of the image object is performed. One skill in the art would detect edges of a workpiece in images in order to measure the dimensions of the workpiece and find defects on the workpiece, so the operator is able to correct the defects minimizing errors.

With regards to claims 4 and 5, see the rationale and rejection for claim 1. In addition, Sathyanarayana uses a computer with a storage medium containing programs to perform methods on claim 1 (see paragraph 2 – eg. medical ultra sound imaging device requires a computer).

3. Claims 2, 3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sathyanarayana (US pub no 2004/0146201) as applied to claim 1 further in view of official notice (MPEP 2144.03).

With regards to claim 2, Sathyanarayana discloses all of the claim elements / features as discussed above in rejection for claim 1 and incorporated herein by reference, but fails to disclose having the user set the width of unit windows. It is well known in the art to have the user specific the window size of an edge detection operator. For example Photoshop as a function having the user set the size of the Sobel filter window. One skill

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in the art would have the user set the size of the window size because to have the user experiment with the image filtered results of using different Sobel window size to find the best result.

With regards to claim 3, Sathyanarayana discloses all of the claim elements / features as discussed above in rejection for claim 1 and incorporated herein by reference, but fail to disclose having the *user assign* the distance between adjacent windows.

Sathyanarayana discloses the arrays of windows having a predetermined arrangement (see paragraph 18 lines 1 – 3) and an example of this arrangement is having a square arrangement with each window at each corner, paragraph 18 lines 10 – 12. It is well known in the art to have the user set image filtering parameters (MPEP 2144.03). One skill in the art would have the user set the distance between adjacent windows because to have the user experiment with the filtered image results of using different parameter values to find which parameter gives the best result.

With regards to claim 6, see the rationale and rejection for claim 2.

With regards to claim 7, see the rationale and rejection for claim 3.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Liew whose telephone number is (571)272-8623. The examiner can normally be reached on 9:30AM - 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Alex Liew**  
**AU2624**  
**2-12-07**

  
JOSEPH MANCUSO  
SUPERVISORY PATENT EXAMINER